

Claim 1 is allowable over the cited references in that claim 1 recites a combination of elements including, for example, “A backlight unit in a liquid crystal display including a light-guiding plate, a reflection plate, …a diffusion plate, …the liquid crystal display following a field sequence, wherein a plurality of lamps are arranged such that LED chips realizing R, G, and B colors are built in the respective lamps.” The cited references including Kawano et al. and Satoh, either singly or in combination, do not teach or suggest at least these features of the claimed invention. Accordingly, Applicants respectfully submit that claim 1 and claims 2-4, which depend from claim 1, are allowable over the cited references.

Claim 5 is allowable over the cited references in that claim 5 recites a combination of elements including, for example, “A backlight unit in a liquid crystal display including a light-guiding plate, a reflection plate, …a diffusion plate, …the liquid crystal display following a field sequence, wherein a plurality of chips are arranged such that LED chips realizing R, G, and B colors are built in the respective chips.” The cited references including Kawano et al. and Satoh, either singly or in combination, do not teach or suggest at least these features of the claimed invention. Accordingly, Applicants respectfully submit that claim 5 and claims 6-8, which depend from claim 5, are allowable over the cited references.

Claim 9 is allowable over the cited references in that claim 9 recites a combination of elements including, for example, “A backlight unit in a liquid crystal display including a light-guiding plate, a reflection plate, and a diffusion plate, …the liquid crystal display following a field sequence, …a plurality of lamps arranged in a plurality of rows; and three LED chips built in each of the lamps, the three LED chips realizing R, G, and B colors respectively, wherein the lamps are turned on/off according to a sequence of a R chip, a G chip, and a B chip in each of the rows.” The cited references including Kawano et al. and Satoh, either singly or in combination, do not teach or suggest at least these features of the

claimed invention. Accordingly, Applicants respectfully submit that claim 9 is allowable over the cited references.

Claim 10 is allowable over the cited references in that claim 10 recites a combination of elements including, for example, “A backlight unit in a liquid crystal display including a light-guiding plate, a reflection plate, and a diffusion plate, …the liquid crystal display following a field sequence, …a plurality of chips arranged in a plurality of rows; and three LED chips built in each of unit chips, the three LED chips realizing R, G, and B colors respectively, wherein the unit chips are turned on/off according to a sequence of a R chip, a G chip, and a B chip in each of the rows.” The cited references including Kawano et al. and Satoh, either singly or in combination, do not teach or suggest at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 10 is allowable over the cited references.

The Examiner cites Kawano et al. as disclosing “a light guiding plate (22), a reflection plate (23), and a diffusion plate (12), a backlight unit using LED (2a) as a back light lamp…”. Further, the Examiner asserts Satoh teaches “that it is known to modify a backlight liquid crystal display with LED chips containing R, G, and B colors as a set”, and concludes “It would have been obvious to… modify backlight of [Kawano et al.] to utilize for a liquid crystal display, as taught by [Satoh] in order to illuminate LCD using LEDs containing R, G, and B colors (white LED).” Office Action at 2.

Contrary to Examiner’s citation of Kawano et al., Applicant respectfully submits Kawano et al. does not teach or suggest, for example, at least the aforementioned elements recited in at least claims 1, 5, 9, and 10. For example, Applicant respectfully submits Kawano et al. teaches at column 1, lines 5-6 “The present invention relates to a light emitting display having an LED lamp as a light source.” At column 7, lines 32-35, Kawano et al.

teaches “Its display body 22 is made of a sheet of a milk-white color, light diffusing resin material which comprises a transparent resin doped with a light diffusing agent 12...” at column 5, lines 35-40, “...the transparent resin provided as the base component of the light diffusion material of the display body... may be selected from acrylic..., epoxy..., urea..., polycarbonate..., and other non-opaque resins” and lines at 43-50, “The light diffusing agent added to the transparent resin... may be selected from powder forms of silicon oxide, aluminum oxide, titanium oxide, ...barium titanate... [or] ...any other transparent resin... may be used in the form of small particles.”

Applicant respectfully submits the neither the “display body 22” nor the “light diffusing agent 12” disclosed by Kawano et al. could be reasonably construed to mean “light guiding plate (22)” or “diffusion plate (12)” as asserted by the Examiner. To do so would, as set forth in M.P.E.P. § 2111, while during patent examination, pending claims must be given their broadest reasonable interpretation, the “broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach”.

Applicant respectfully submits they may be their own lexicographer as long as the meanings assigned to the terms are not repugnant to the term’s well known usage.

Accordingly, Applicant respectfully submits one of ordinary skill will readily recognize that a “light-guiding plate”, such as that claimed in the present invention, is not to be equated with “a light diffusing resin material which comprises a transparent resin doped with light diffusing agent” as disclosed by Kawano et al. Further, Applicant respectfully submits one of ordinary skill in the art will readily recognize that a “diffusion plate”, such as that claimed in the present invention, is not to be equated with “a light diffusing agent...[provided as a material] selected from powder forms of silicon oxide, aluminum oxide... [or] any other transparent resin... used in the form of small particles.”

Even assuming, *arguendo*, that a “light-guiding” could be equated to “diffusing” and that “plate” could be equated with “powder (or material in the form of small particles) used in doping”, a *prima facie* case of obviousness has not been established by the cited combination of references. For example, to establish a *prima facie* case of obviousness, there must at least be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Applicant respectfully submits, there is no proper suggestion or motivation found in either Kawano et al. or in Satoh to combine the teachings of the cited references and arrive at the claimed invention. Such combination is, however, suggested only by the claimed invention which is considered impermissible hindsight reconstruction. Applicant respectfully submits even if the references relied upon teach that all aspects of the claimed invention were individually known in the art, a *prima facie* case of obviousness cannot be made without some objective reason to combine the teachings of the references. (see M.P.E.P. § 2143.01)

No Suggestion to combine

In rejecting claims 2 and 6, the Examiner states “It is inherent that LED lamps has a luminescent area over 100 degrees.”

Applicant respectfully submits that it is not “inherent” that the LED lamps of Kawano et al. in view of Satoh have a luminescent area over 100°. It appears that the Examiner attempts to cure the deficiencies of Kawano et al. in view of Satoh by relying on inherency. Applicant respectfully directs the Examiner to M.P.E.P. § 2112 disclosing “in relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” Contrary to these teachings, the Examiner has provided no basis in fact or technical reasoning supporting the determination that at least

the combination of elements recited above as recited in the aforementioned claims is an inherent element of Kawano et al. or Satoh, either singly or in combination.

Applicant believes the application is in condition for allowance and early, favorable action is respectfully solicited. Should the Examiner deem that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at (202) 496-7500.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136. Please credit any overpayment to deposit Account No. 50-0911.

Respectfully submitted,

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